

CLAIMS

1. A dispersant composition comprising i) at least one non-ionic surfactant and ii) at least one polymer comprising at least one salt of a carboxylic acid group.
2. The dispersant composition of claim 1, wherein the non-ionic surfactant is a polyalkylene oxide.
3. The dispersant composition of claim 2, wherein the polyalkylene oxide comprises an alkylene oxide group of from about 1 to about 12 carbons.
4. The dispersant composition of claim 2, wherein the polyalkylene oxide comprises a -CH₂-CH₂-O- group, a -CH(CH₃)-CH₂-O- group, a -CH₂-CH(CH₃)-O- group, a -CH₂-CH₂-CH₂-O- group, or combinations thereof.
5. The dispersant composition of claim 2, wherein the polyalkylene oxide comprises a capping group.
6. The dispersant composition of claim 5, wherein the capping group is a C1-C20 alkyl group or an aromatic group.
7. The dispersant composition of claim 2, wherein the polyalkylene oxide has a molecular weight between about 500 and 20000.
8. The dispersant composition of claim 7, wherein the polyalkylene oxide has a molecular weight between about 1000 and 10000.
9. The dispersant composition of claim 1, wherein the non-ionic surfactant is insoluble in water.

10. The dispersant composition of claim 1, wherein the polymer comprises an ammonium salt of a carboxylic acid.
11. The dispersant composition of claim 1, wherein the polymer is a salt of a copolymer of acrylic acid.
12. The dispersant composition of claim 1, wherein the polymer is an ammonium salt of a copolymer of acrylic acid and methylmethacrylate.
13. The dispersant composition of claim 1, wherein the polymer has a molecular weight between about 5000 and 50000.
14. The dispersant composition of claim 13, wherein the polymer has a molecular weight between about 10000 and 40000.
15. The dispersant composition of claim 1, wherein the non-ionic surfactant is a polyalkyleneoxide and wherein the polymer is an ammonium salt of a copolymer of acrylic acid and methylmethacrylate.
16. The dispersant composition of claim 1, wherein the polymer is soluble in water.
17. The dispersant composition of claim 1, further comprising an aqueous solvent.
18. The dispersant composition of claim 17, further wherein the aqueous solvent is water.
19. The dispersant composition of claim 1, further comprising at least one base.
20. The dispersant composition of claim 17, wherein the base is an hydroxide reagent or an amine.

21. The dispersant composition of claim 17, wherein the base is ammonia.
22. A pigment composition comprising a) at least one pigment, and b) at least one dispersant composition comprising i) at least one nonionic surfactant and ii) at least one polymer comprising at least one salt of a carboxylic acid group.
23. The pigment composition of claim 22, wherein the pigment is a modified carbon product comprising a carbon product having attached at least one organic group.
24. The pigment composition of claim 22, wherein the organic group comprises at least one ionic group, at least one ionizable group, or a mixture thereof.
25. The pigment composition of claim 22, wherein the organic group comprises at least one anionic group.
26. The pigment composition of claim 22, wherein the organic group comprises at least one carboxylic group, a sulfonate group, or salts thereof.
27. The pigment composition of claim 22, wherein the organic group is a carboxyphenyl group, a sulfophenyl group, or salts thereof.
28. The pigment composition of claim 22, further comprising an aqueous vehicle.
29. The pigment composition of claim 28, wherein the aqueous vehicle is water.
30. The pigment composition of claim 22, wherein the nonionic surfactant is a polyalkylene oxide, the polymer is an ammonium salt of a copolymer of acrylic acid and methylmethacrylate, and the pigment is a modified carbon product comprising a carbon product having attached at least one sulfonate group.

31. An aqueous coating composition comprising a) an aqueous vehicle comprising a water-based resin and an aqueous solvent, b) at least one pigment, and c) at least one dispersant composition comprising i) at least one nonionic surfactant and ii) at least one polymer comprising at least one salt of a carboxylic acid group.

32. The aqueous coating composition of claim 31, wherein the water-based resin is an acrylic resin, a polyurethane resin, an epoxy resin, a polyester resin, an alkyd resin, or a vinyl chloride-copolymer resin.

33. The aqueous coating composition of claim 31, wherein the water-based resin is an acrylic latex.

34. The aqueous coating composition of claim 31, wherein the aqueous solvent is greater than 70% water.

35. The aqueous coating composition of claim 31, wherein the aqueous solvent is greater than 85% water.

36. The aqueous coating composition of claim 31, wherein the pigment is a modified carbon product comprising a carbon product having attached at least one organic group.

37. The aqueous coating composition of claim 36, wherein the organic group comprises at least one ionic group, at least one ionizable group, or a mixture thereof.

38. The aqueous coating composition of claim 36, wherein the organic group comprises an anionic group.

39. The aqueous coating composition of claim 36, wherein the organic group comprises a carboxylic group, a sulfonate group, or salts thereof.

40. The aqueous coating composition of claim 36, wherein the organic group is a carboxyphenyl group, a sulfophenyl group, or salts thereof.

41. The aqueous coating composition of claim 31, wherein the nonionic surfactant is a polyalkylene oxide, the polymer is an ammonium salt of a copolymer of acrylic acid and methylmethacrylate, and the pigment is a pigment is a modified carbon product comprising a carbon product having attached at least one sulfonate group.